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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

PORTER, RACHEL L

| ART UNIT | PAPER NUMBER |
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3626

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/754,547

Applicant(s)

Examiner

Rachel L. Porter

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the application filed 1/03/01. Claims 1-56 are pending. The IDS filed 7/2/01 has been entered and considered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-32, 42, and 55-56 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. [*"Usefulness" may be evidenced by, but*

not limited to, a specific utility of the claimed invention. "Concreteness" may be evidenced by, but not limited to, repeatability and/or implementation without undue experimentation. "Tangibility" may be evidenced by, but not limited to, a real or actual effect.]

As per claims 21-32 and 55-56, it is unclear as to which recognized statutory class of invention the "database" of claims 21 and 55 is directed. In particular, a "database" is not a process or method, as it lacks a series of steps. Since the database is not fixed in some tangible medium, it is not an "article of manufacture". Furthermore, a "database" is not recognized as a composition of matter. While the claims recite a list of data contained in the database, it is not considered a system, as there is no specific recitation of *machine or system components*.

Under the guidance of recent case law, the requirements of 35 U.S.C. 101 are met when "the practical application of the abstract idea produces a useful, concrete, and tangible result" (*State Street Bank & Trust Co. vs. Signature Financial Group, Inc.*, 47 USPQ2d 1596, 1601-02 (Fed. Cir. 1998)). In general, a database is conceptually useful for storing information. Claims 21-32 and 55-56 merely recite non-functional descriptive material, as there is no recitation of executable code or data structure embodied on any medium. Moreover, the recited databases do not impart any specific functionality to any tangible system components. Thus, the "databases" described in claims 21-32 and 55-56, are not tangibly embodied, and fail to produce a concrete and tangible result.

In light of the above, it is respectfully submitted that the claimed invention, as described in claims 21-32 and 55-56, although useful, does not have a tangible and

concrete result, and thus fails to recite the practical application of an abstract idea to satisfy the requirements of 35 U.S.C. 101.

As per claim 42, the present claim recites "logic for. . ." in the body. Data structures not embodied on a computer readable media are considered descriptive material. They are therefore considered non-statutory because they are not capable of causing a functional change in a computer. As drafted, the claim fails to define any structural and functional interrelationships between the "logic" and other elements of a computer that permit the computer program's function to be realized. (See MPEP § 2106).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Bessette (US Patent No. 6,263,330).

In reference to claim 1, Bessette teaches a data searching method comprising:

- receiving information about a medical procedure performed for patient based upon a request from a healthcare provider (Figure 4, 9)
- querying to retrieve a list of data sources data sources from one or more

- databases based on received information (Figure 9; col. 3, line 41-col. 4, line 52; col. 11, lines 11-67; col. 15, lines 25-col. 16, line 29)
- generating one or more documents containing list of data sources retrieved from database (Figure 9, col. 3, lines 41-col. 4, lines; col. 7, lines 52-col. 8, line 4; col. 12, lines 1-67; col. 15, lines 25-col. 16, line 29))

In reference to claims 46, the limitations of the present claim are addressed in the discussion of claim 1 above.

5. Claim 55 is rejected under 35 U.S.C. 102(e) as being anticipated by Evans (US Patent No. 5,924,074)

In reference to claim 55, Evans teaches a method the uses a database comprising:

- a list of patients (column 8, lines 19-28)-a patient repository stores patient lists and patient records
- a set of documents for each patient, generated based upon information received from the healthcare provider after performing a procedure for the patient, said documents being accessible by a computer network (column 8, lines 61-67; column 9, lines 14; column 12, lines 56-60)

The patient repository stores a list of patients and patient records (i.e. set of documents) which are accessed by a physician to be annotated or used as a reference. The method taught by Evans may operate over several types of computer networks. (i.e. wherein the information is accessible to the healthcare provider via a computer network.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-37 and 47-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bessette in view of Evans (US Patent No. 5,924,074).

In reference to claims 2-5, Bessette teaches a medical retrieval method that incorporates the use of codes to identify relevant medical data (col. 13, lines 52-56; col. 14, lines 10-21). However, Bessette does not specifically disclose the use of ICD or CPT codes for retrieving relevant medical data using various health codes. Evans teaches a data retrieval system/method wherein receiving data in the patient's records comprises accessing procedure codes or diagnosis codes for procedures/diagnoses that the patient has undergone/received and wherein the codes are CPT or ICD codes. (column 9, lines 4-7, figure 20; column 11, lines 14-27). At the time of the Applicant's invention, it would have been obvious to one of ordinary in the art to combine the teachings of Bessette with the teachings of Evans. One would have been motivated to include these features to facilitate a treating healthcare provider's access to a wide range of critical medical data relating to his/her patients.

In reference to claims 6-7, Bessette teaches a data retrieval method wherein the data source is referenced by an address and this address comprises a URL (i.e. a web address) (column 13, lines 1-38)

In reference to claims 8-17 and 20 Bessette teaches different methods of querying and retrieving data by using conceptual/code linkages between the user's query terms and related concepts to develop a visual representation of information sites of interest to the user. (col. 13, lines 40-col 14, lines 21) Furthermore, Bessette teaches methods of retrieving information from these sites. (col. 13, lines 1-38; col. 14, lines 53-col 15, line 3, line 25-col. 16, line 4) but does not teach the use of the specific recited medical codes to retrieve information. Evans puts the user query/ and data retrieval in the context of a healthcare provider accessing patient records using procedure and diagnostic codes. (figures 19-20, column 9, lines 4-7, column 11, lines 10-30). At the time of the Applicant's invention, it would have been obvious to one of ordinary in the art to combine the method of Bessette with the teachings of Evans for the reasons explained in the rejection of claims 2-5.

In reference to claims 18-19, Bessette teaches a system that operates via the Internet (col. 6, line 64-col 7, line 21) and wherein a healthcare provider (i.e. the healthcare facility) can provide feedback on information contained in the retrieved documents (col. 14, lines 39-col. 15, line 3).

In reference to claim 21-22, Bessette teaches a system including a queryable knowledge base (col. 15, line 25-col. 16, line 29). Bessette also discloses a system including a list of data sources and wherein a visual representation of sites of interest to the user (i.e. list) based on user queries is generated. (col. 13, lines 1-65) The visual representation is developed using a site description language that allows linkages to be drawn between user query terms and related concepts. (col. 13, line 23-col. 14, line 21)

Bessette also discloses a database that includes a first code corresponding to a medical procedure (col. 13, lines 52-56, but does not specifically disclose database includes a list of definitions corresponding to the first code. Evans teaches an information database comprising a list of one or more definitions correspond to the first code (Figures 20-21; col. 9, lines 4-7) At the time of the Applicant's invention, it would have been obvious to one of ordinary in the art to combine the teachings of Bessette with the teachings of Evans. One would have been motivated to do this to facilitate a treating healthcare provider's access to a wide range of critical medical data relating to his/her patients.

In reference to claims 23-25, Bessette teaches different methods of querying and retrieving data by using conceptual linkages between user's query and related concepts to develop a visual representation of information sites of interest to the user. (col. 13, lines 1-col. 14, line 21) Furthermore, Bessette teaches methods of retrieving information from these sites, including procedure codes. (col. 13, line 52-56).

In reference to claims 26-30, Bessette teaches a system including a queryable knowledge base and a list of data sources. (col. 13, lines 1-65; col. 15, lines 25-29) and wherein the knowledge base includes medical information with several types of medical codes. (col. 13, lines 52-59)

In reference to claims 31-32, Bessette teaches a data retrieval method wherein the data source is referenced by an address and this address comprises a URL (column 13, lines 1-38)

In reference to claims 33-37, Bessette teaches a method comprising:

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- generating one or more queries based upon the user's subject of interest; (Figure 9, col. 3, lines 41-col. 4, lines; col. 7, lines 52-col. 8, line 4; col. 12, lines 1-67; col. 15, lines 25-col. 16, line 29)
- identifying one or more documents based upon one or more queries; (Figure 9, col. 3, lines 41-col. 4, lines; col. 7, lines 52-col. 8, line 4; col. 12, lines 1-67; col. 15, lines 25-col. 16, line 29)
- performing a selection process to select certain documents based on a selection criteria (col. 15, lines 25-col. 16, line 29)

Bessette teaches different methods of generating and refining queries, and retrieving data by using linkages between the user's query and other concepts to develop a list of possible information sites of interest to the user. (col. 15, lines 25-col. 16, line 29)

Furthermore, Bessette teaches methods of selecting and retrieving information (i.e. documents) from these sites. Evans puts the user query/ and data retrieval in the context of a healthcare provider accessing patient records using medical codes including procedure and diagnostic codes. (figures 19-20, column 9, lines 4-7, column 11, lines 10-30). At the time of the Applicant's invention, it would have been obvious to one of ordinary in the art to combine the teachings of Bessette with the teachings of Evans. One would have been motivated to do this to facilitate a treating healthcare provider's access to a wide range of critical medical data relating to his/her patients.

In reference to claims 47-49, the limitations of these claims are addressed in the discussion of claims 2, 4 and 8 above.

In reference to claims 50-54, the limitations of these claims are addressed in the

discussion of claims 33-37 above.

8. Claims 38-45 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans.

In reference to claim 38-39 and 42-45, Evans teaches a system wherein providers can access information regarding medical procedures and diagnoses from a reference database (column 11, lines 10-64). Furthermore the system includes a patient data repository (i.e. database), which contains records, including patient ID numbers, diagnosis codes and procedure codes. (column 9, lines 4-14) Information is transferred, received and stored between the database as the user (i.e. healthcare provider) requests information, including procedure and diagnosis information, from the different databases (i.e. queries the system for data content). Furthermore, as shown in Figure 24, the system operates over a variety of computer networks including the world wide web, LAN's and WAN's. Evans does not specifically teach that system servers perform the functions of transferring, receiving and storing. At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to enable the system servers in the system of Evans to retrieve, transmit, receive and store the data as needed to satisfy the provider's requests for procedure information (i.e. satisfy the user's query). One would have been motivated to do this to facilitate physician access to patient data in a variety of formats that is otherwise difficult to access when needed for analysis and to further enhance the quality of patient care. (See Evans: col. 2, lines 5-64)

In reference to claims 40-41, Evans teaches a system wherein the one or more

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documents are accessible over several computer networks including the Internet. (col. 12, lines 56-67, col. 13, lines 1-30)

In reference to claim 56, Evans teaches a database wherein the information received includes procedure codes, (column 9, lines 4-14). Evans does not teach that procedure codes are used to retrieve one or more lists or data sources to be included in the patient documents. However, at the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to make the data retrievable by different codes or information to be included the documents. One would have been motivated to do this to make it easier to access desired information.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Senda et al (JP 10063752 A) teach a system for updating ICD codes in a database.
- Rensimer et al (USPN 5845253) teach a system for accessing and storing patient information regarding on-going treatments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703)305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

RP

RP

September 29, 2003

Alexandra Alexander
Alexander Alexander
PATENT EXAMINER
AU 3626